

### **Abstract**

A transimpedance amplifier (TIA) circuit and received signal strength indicator (RSSI) circuit are provided on a same integrated circuit substrate for providing of a TIA output signal and a RSSI signal. The RSSI signal is being used as an indication of optical alignment when aligning of an optical fiber to a photodetector coupled with the TIA during optical receiver manufacture or as received optical signal strength during operation. This allows for the TIA and RSSI circuit to be disposed within an optical signal receiver module prior to optical alignment. The TIA overcomes limitations of the prior art by allowing for a 2V reverse bias voltage to be provided on a PIN diode when the PIN diode is used with a single ended 3.3V supply voltage.